

AMENDMENTS

In the Claims:

Please amend the claims as follows:

1. (Currently amended) A method for detecting disseminated tumor cells that express any of cytokeratins 1-20 from a body fluid, in which non-tumor cells which express at least one of cytokeratins 1-20 are separated from tumor cells which express at least one of cytokeratin 1-20, ~~in which~~ the method comprising:

- a) enriching tumor cells ~~are enriched~~ by a cell separation medium which has a density in the range from 1.055 to 1.065 g/ml being overlaid with the body fluid and being centrifuged, thus separating cytokeratin-positive and cytokeratin-negative blood cells from one another, with the enriched tumor cells being present in the same fraction as the cytokeratin-negative blood cells; and wherein the centrifugation is carried out in a vessel which is divided by a porous barrier, a filter, a sieve, or a flap into an upper and a lower compartment, the cell separation medium being introduced into the lower compartment, and the body fluid being put in the upper compartment, and wherein the porous barrier, the filter, the sieve or the flap has a thickness of 0.5 – 10 mm; and
- b) using RT-PCR with a cytokeratin 1-20 specific primer to detect said any cytokeratin 1-20 expressing tumor cells in said enriched tumor cell fraction ~~cells is determined whether the enriched cells express an epithelial marker, which is cytokeratin, characterized in that there is reverse transcription of mRNA from the enriched cells, and a PCR is carried out with at least one cytokeratin-specific primer, where the cytokeratin is selected from the group consisting of cytokeratin 1 to 19 and 20.~~

~~2. (canceled).~~

~~3. (canceled).~~

- 2 ~~4~~ (previously presented) The method of claim 1, wherein the porous barrier, the filter, the sieve or the flap has a porous size of 20-100 μm .
- 3 ~~5~~ (previously presented) The method of claim ~~4~~², wherein the porous barrier, the filter, the sieve or the flap is a hydrophobic material or is coated with a hydrophobic material.
- 4 ~~6~~ (previously presented) The method of claim 1, wherein the cell separation medium comprises a dye which makes the cell separation medium distinguishable in color from the overlying body fluid, and thus simplifies location of the interphase.
- 5 ~~7~~ (previously presented) The method of claim 1, wherein in step b) there is determination in single or combination analysis of whether the enriched cells express at least one epithelial marker from cytokeratins 1-20.
- ~~8.~~ (canceled).
- ~~9.~~ (canceled).
- ~~10.~~ (canceled).
- 6 ~~11~~ (previously presented) The method of claim 1, wherein the porous barrier, the filter, the sieve or the flap has a thickness of 1-5 mm.
- 7 ~~12~~ (previously presented) The method of claim ~~4~~², wherein the porous barrier, the filter, the sieve or the flap has a porous size of 20-30 μm .
- ~~13.~~ (canceled).